

How and why capitalisms differ

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How and Why Capitalisms Differ

Robert Boyer



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Abstract

Both the varieties of capitalism school (VOC) and regulation theory (RT) address the issue of how and why capitalisms differ. If VOC challenges the primacy of liberal market economies (LME) and stresses the existence of an alternative form, i.e. coordinated market economies (CME), RT starts from a long-term analysis of the transformation of capitalism in order to search for alternatives to the Fordist regime that emerged after the post-WW II era. Both approaches frequently use in-depth international comparisons, challenge the role of the market as the exclusive coordinating mechanism, and raise doubts about the existence of 'one best way' for capitalism. Finally, they stress that globalization deepens the competitive advantage associated with each institutional architecture. Nevertheless, their methodology differs: VOC stresses private-firm governance, whereas RT considers the primacy of systemic and macro-economic coherence. Whereas for VOC there exists only LME and CME, RT recurrently finds at least four brands of capitalism: market-led, meso-corporatist, social democratic and state-led. VOC seems to consider that the long-term stability of each form of capitalism can only be challenged by external shocks, but RT stresses the fact that the very success of a regulation mode ends up in a – largely endogenous – structural crisis. Whereas RT started from a rather economic point of view and now investigates the crucial role of politics, VOC originated largely in political science and political economy but now explores the economic theory of the firm.

Zusammenfassung

Sowohl die Lehre von der Diversität nationaler Kapitalismen (VOC) als auch die Regulierungstheorie (RT) beschäftigen sich mit der Frage, wie Kapitalismen sich unterscheiden und warum sie es tun. Wenn die VOC die Vorrangstellung von freien Marktwirtschaften (LME) in Frage stellt und die Existenz einer Alternative, nämlich die der koordinierten Marktwirtschaften (CME) betont, so beginnt die RT mit einer Langzeituntersuchung der Transformation von Kapitalismen mit dem Ziel, Alternativen zum Fordismus der Zeit nach dem 2. Weltkrieg zu finden. Beide Ansätze gebrauchen häufig international vergleichende Detailanalysen, hinterfragen die Rolle des Marktes als exklusiven Koordinierungsmechanismus und zweifeln an der Existenz eines „one best way“ des Kapitalismus. Schließlich wird auf beiden Seiten betont, dass die Globalisierung den Wettbewerbsvorteil einer jeden institutionellen Architektur noch verbessert. Trotzdem ist die Methodologie unterschiedlich: Die Lehre von der Diversität nationaler Kapitalismen hebt die Governance der Privatwirtschaft hervor; für die Regulierungstheorie ist ihr die systemische und makroökonomische Kohärenz überlegen. Während die VOC sich ausschließlich auf LME und CME stützt, gibt es für die RT wenigstens vier verschiedene Arten von Kapitalismus: den marktgeführten, den mesokorporatistischen, den sozialdemokratischen und den staatlich kontrollierten Kapitalismus. Für die VOC scheint die Langzeitstabilität aller Kapitalismen nur von externen Faktoren zu erschüttern sein; die RT legt Wert auf die Feststellung, dass der Erfolg einer Regulierungsmethode mit einer weitgehend endogenen Strukturkrise endet. Während die RT, von einem weitgehend ökonomischen Startpunkt ausgehend, nunmehr die entscheidende Rolle der Politik untersucht, setzt sich die weitgehend aus Politikwissenschaft und politischer Ökonomie stammende VOC heute mit wirtschaftlichen Unternehmenstheorien auseinander.

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Introduction

During the 1960s, comparative economic system analysts shared the vision that capitalist and socialist economies would finally converge towards a mixed economy combining market mechanisms and state interventions. During the 1970s, few economists were concerned with the issue of capitalism, since most scholars preferred to deal with market economies and to concentrate more and more on specialised issues. Back in the 1980s, when Japanese economic performance seemed to challenge the American hegemony, American economists took some interest in analysing the difference between American and Japanese capitalism. Since the collapse of Soviet Union, another issue has emerged, prompting the question whether the diverse national economies will converge toward a single model or whether we should expect the coexistence/competition between at least two variants of capitalism, namely, the Rhine model and the so-called Anglo-Saxon one. Similarly, the globalisation process and the financialisation of economies have raised the same question about corporate governance: is not 'one best way' bound to replace obsolete governance systems?

This paper proposes to survey two parallel research programmes that precisely investigate these issues about the evolution and the diversity of contemporary capitalism. Actually, recent studies have revealed a remarkable convergence of two previously distinct research currents, one focusing on the many different forms of capitalism, and the other highlighting the diversity of modes of corporate organisation. A leading example is a book by Peter Hall and David Soskice, 'Varieties of Capitalism' (2001), in which the authors set up a dichotomy between the neo-liberal and coordinated forms of market capitalism, offering two contrasting modalities of corporate organisation and of the search for competitiveness.

The present text discusses this theory and compares it with another analysis about the relationship between the institutional forms of capitalism and the productive models firms have adopted. It is based on a conjunction of two research orientations. The first comes under the aegis of what is called Regulation Theory (RT), a school of thought that has tried to describe how institutional forms of capitalism have changed over time and the diversity of architectures that can be observed at any one point in time (Boyer/Saillard 2002). The second draws upon findings from a systematic comparison of the recent changes in the organisation of automobile firms (Boyer et al. 1998; Freyssenet et al. 1998; Durand et al. 1998; Lung et al. 1999; Boyer/Freyssenet 2002).

The presentation will be organised in the following manner. It will first demonstrate how research into the transformation of capitalism's institutions has actually had unexpected effects – the long-term perseverance of a variety of forms of capitalism. A whole range of sectorial studies and of partial studies on the modern era has confirmed the hypothesis that at least four forms of capitalism coexist for OECD countries. We will then examine convergences (and divergences) amongst approaches that have been formulated in Varieties of Capitalism (VOC) terms. Since such approaches

ascribe capitalisms' institutional diversity to two configurations marked by contrasting forms of corporate organisation, they are an inducement to examine recent Regulation Theory-inspired studies and to devise elements substantiating the institutionalist theory of firms and productive models. This is the goal of the third section of the paper, where we focus on hypotheses postulating institutional complementarity and isomorphism between organisations and institutions.

Regulation Theory faced with the diversity of capitalism

At the origin of this approach lies an analysis of the conditions that act *ex post* to ensure the viability of an accumulation process that, by its very nature, is subject to imbalances, contradictions, and conflicts. Whereas traditional Marxist theory can only conceive of a single dynamic for this accumulation process, observations of the trends at work throughout the twentieth century have renewed the theorisation of capitalism. Clearly capitalism goes through sporadic periods of crisis, sometimes coming close to collapse (i.e., the U.S. economy from 1929 to 1932). But what has emerged from these episodes and from the social and political reactions they engender is a re-configuration of competition and production relationships that has been so strong to have given birth to growth regimes which would have been impossible to predict back in the nineteenth century. For this reason, Regulation Theory first focused more on analysing capitalism's stages than the variety of its forms at a particular moment in time. However, further research into the growth regimes that were likely to succeed Fordism, the system to have characterised the golden age of the postwar boom years, revealed the coexistence of many different forms of capitalism. Analysis subsequently carried on to cover modes of regulation and institutional architectures (see box on p. 7). The present section offers a brief overview of this intellectual trajectory.

The United States and France: identical growth regimes but different institutional architectures

How can we explain the development that started in the late 1960s in which accumulation tensions in the United States first manifested themselves through accelerated inflation before spawning a new type of crisis marked by the coexistence of inflation and lower activity levels? A long-term historical overview drawing from Marxist theoretical concepts offers one response. This new type of crisis evolved from a combination of collective agreements on wage increases and a general oligopolistic competition affected by capital concentration, on the one hand, and the use of monetary policy to manage credit in the hope of stabilising the accumulation process, on the other

The varieties of capitalism based on analysis of the modes of regulation

Literature on the many different institutions and organisations that make up today's economies often runs into a major hurdle with respect to the criteria we use to classify (and ultimately hierarchise) the configurations we observe. People often consider the growth rate, total factor productivity growth rate, employment rate or unemployment rate to be performance indicators that can be used to classify observations. However, since economic institutions also act to maintain the social contract as well as the stability lying at the heart of a given political order, there is nothing self-evident about basing a classification on purely economic variables.

Without having explicitly chosen this focus from the very outset, regulationist research has de facto concentrated on homologies between economic adjustment processes. Towards this end it has used a concept entitled 'mode of regulation', a construct comprising all of the individual and collective procedures and behaviours that reproduce basic social relationships, guide active growth regimes, and ensure the accounting of a myriad of decentralised decisions – without actors necessarily being aware of these system-wide adjustment principles (Boyer/Saillard 2002: 565). This definition invites us first to characterise growth regimes by setting up a dichotomy between the dynamics that govern how their productivity gains are obtained and how employees' lifestyles are organised. The net effect is that at least four growth regimes have been identified (Boyer/Juillard 2002: 388). Fordism is only one of them and is defined here as an intensive regime focused on the mass consumption that emanates from wage-earners (Bertrand 1983). The number is greater than four if we consider social relationships other than the ones between capital and labour, one example being the rent relationship (Ominami 1986).

What is essential, however, is what comes next, i.e., the characterisation of institutional forms aside from the wage–labour nexus, to wit, those forms that actually define the mode of regulation itself: form of competition; monetary regime; relationships between the state and the economy; and insertion into the international system. For example, the competitive regime that dominated throughout the second half of the nineteenth century and in the interwar period spurred an intensive growth regime that lacked in employee insertion, whereas Fordism was associated with a regulation described either as monopolistic or administrated, depending on whether emphasis was being placed on the *ex ante* quasi-accounting of supply and demand or on the institutionalisation of coordination procedures (Cepremap-Cordes 1977, 1978; Bénassy et al. 1979). This is somewhat reminiscent of the distinction that VOC makes for the modern era between neo-liberal market capitalism, on the one hand, and coordinated market capitalism, on the other. However, the international comparisons that RT has inspired have led to an entirely different taxonomy of modern capitalisms.

At first, the number of modes of regulation was inflated by a plethora of international comparative analyses, but then the number contracted as a result of criteria developed in theoretical studies (and followed up by observation). First of all, it is important that the adjustment process be endowed with stability over the short or medium term (Billaudot 1996, 2001), even when this property comes under pressure because of slow changes in the mode of regulation itself (Lordon 1996, 1997). Secondly, observations and classifications based on a whole set of shared criteria have shown that the different modes of regulation can be combined into a small number of configuration types (Amable et al. 1997).

Why is it then that modes of regulation focus on a small number of configuration types, whereas RT stresses the political origins of institutional forms? The first reason is that social and political battles may be one source of institutional forms, but the imperatives of economic reproduction are what decide which configurations are going to be viable, via a co-development process (Dosi 2002). A second reason may stem from the isomorphism between different institutional and organisational forms (Di-Maggio/Powell 1991), depending on whether a market, meso-corporatist, social democratic or statist logic prevails (cf. Table 4 below). A third factor emphasised by recent research is a hierarchy (Boyer 1993) or complementarity (Amable 1999, 2001, 2002) among institutional forms that has been found to exist during every major era.

(Aglietta 1976). This change in structural forms (viewed as a codification of basic social relationships) is what made it possible to set up an intensive mass consumption-oriented growth regime – a.k.a. Fordism. This sort of characterisation is part of an analytical tradition that once focused on capitalism's different stages. Of course, it runs counter to a sequencing going from competitive capitalism in the nineteenth century to monopolistic capitalism in the first half of the twentieth century and then monopolistic state capitalism (Tcheprakov 1969; Marx 1971).

Was this change general or was it restricted to the United States, where, according to Marxist theory, capitalism was becoming what it had been in England during the previous century, to wit, the social laboratory from whence epochal innovations should emerge (albeit without any uniform diffusion)? A historical study of French capitalism using the same methodology both confirmed this analysis and modified it subtly (Cepremap-Cordes 1977, 1978). Institutional, statistical, and econometric analyses confirmed a striking parallelism in the way growth regimes developed in France or the United States. The interwar period's intensive accumulation without mass consumption had caused the crisis of the 1930s in both countries. However, after the Second World War, changes in production and consumption norms began to synchronize, a development that specifically led to the advent of Fordism. And yet, the architectures of institutional forms guiding this growth regime were not identical. Whereas market logic continued to play a crucial role in the United States, France was characterised by a great deal of institutionalisation, based on multiform state intervention. If we were to compare the two countries' modes of regulation in detail, we would see that they were far from equivalent.

This diagnosis is confirmed by comparing the paths the two countries followed during the crisis of Fordism. On one hand, a logic based on the premise of competition was reactivated in the United States, raising questions about the wage-labour nexus's preceding mode of institutionalisation, the moderation of inter-firm competition, and the style of public intervention. In a sense, this was the return to a long tradition in American history (Aglietta 1986). On the other hand, in France a much more extensive codification of institutional forms initially helped to attenuate the brutality of the crisis, ultimately spreading its impact over time. Of course, this also meant that the state would centralise those reforms that became necessary as the limitations of Fordism became apparent (Coriat 2002). In addition, these were reforms that turned out to be particularly difficult to manage in the 1980s and 1990s – one reason why the American and French forms of capitalism have diverged so much over the past twenty years.

Retrospectively, the fact that two different institutional architectures – one dominated by the market, the other by multiform state interventions (Boyer 1999) – could 'pilot' two growth regimes of the same ilk already raises questions about the institutional diversity of capitalism. By the by, this was also the first sign of a dichotomy between a market-dominated capitalism and one with a strong statist

impetus. Another lesson was that convergences and divergences are tied to a particular period in time but do not constitute a general feature, as proven by the comparison between United States and France.

What if Fordism were the exception?

It remains that this initial comparison does not fully exhaust questions about the diversity of capitalism's institutions. Strengthened by the types of outcomes achieved by establishing Fordism in France and in the United States, regulationist research then tried to analyse whether the industrialised OECD economies were part of the same process. Clearly, mass production and mass consumption eventually dominated in most European countries (Boyer 1986b) as well as in Japan (Yamada 1992; Inoué/Yamada 2002). Yet institutional forms were given a range of different codifications from one country to the next. This was particularly true with the wage–labour nexus. At first, it seemed possible to account for observed diversity by seeing it as something akin to minor variants of a canonical form of Fordism. For example, the belated reference to Fordism in Germany (not until the 1970s), plus the country's accentuated polyvalence and more extensive employee rights led people to believe that the FRG was operating a flexi-Fordist rather than a typical form of mass production (Leithausser 1986). Similarly, Italy exemplified a strong heterogeneity in its wage–labour nexus: in northern Italy, workers' struggles resulted in a significant institutionalisation of industrial relations, whereas in Third Italy the rules of the game were more implicit and quite different. Thus, it proved easier to make economic adjustments there than in northern Italy (Wolleb 1986). Lastly, England provided a remarkable counter-example by disproving the notion that supposedly superior forms of wage–labour nexus or productive organisation would automatically be successfully diffused – an example of hindered Fordism (Ward 1986).

Add to this the many different studies on other countries, and people could no longer help but acknowledge that Fordism, when defined by a conjunction of three properties, was a feature found only in a few countries at best. These said properties were, first, a mainly intensive type of mechanisation-driven accumulation; second, a capital–labour compromise in which shared productivity gains were ensured; and third, a circuit of accumulation operating within the national space, without any undue constraint as a result of the international mode of insertion (Boyer 2002). Take the example of Canada. Given its specialisation and dependency both on natural resources and commercial relations with the United States, Canada was at best a permeable type of Fordism (Jenson 1990) and in all likelihood followed an entirely different type of growth regime. Confirmation that the Fordist model per se was not what was actually being diffused should have come from applying this approach to the industrialising economies. The only theoreticians refusing to see this were ones hoping to renew our

understanding of international relations by stressing the position each country occupies in the capital circuit organised under the aegis of Fordism (Lipietz 1985). Brazil, for example, did import mass production techniques. However, given the country's uneven income distribution and the absence of contractual employment relationships in the corresponding industries, the hypothesis of a Fordism imposed upon a reluctant society (Coriat/Saboia 1987) needed to be replaced by a much more structural and specific analysis of growth regimes in Latin American and Southeast Asian economies (Boyer 1994).

Two other results also helped to relativise the generality of the Fordist growth regime. What became apparent when people wanted (prematurely) to apply a Fordism analysis to economies other than those of the United States or France was that the macro-economic interconnections (in terms of growth, productivity, and capital intensity) could be of a very different nature, for example, in the German and Japanese economies (Barou/Keizer 1984; Baslé/Mazier/Vidal 1984). Growth was export-driven in some of these economies, with competitiveness stemming from a price effect (or from quality and innovation) and wage bargaining first occurring in the export sector before spreading to the rest of the economy. All of these interconnections reversed the direction of the causality as postulated in a Fordist model that, ideally, would have liked to break free from international relations and the constraints they force upon domestic dynamics. Note that these are the economies that VOC describes as being coordinated, and where the social protection system mainly develops along the lines of a social-democratic national model.

A second series of studies examined the characteristics of the wage-labour nexus's development and rearrangement trajectories, seeing as this is the institutional form that played such a key role in the Fordist regime (Boyer 1991). The findings of these studies indicated that, even if the factors of change were widely shared (internationalisation, new wave of technological innovation, tight monetary policy, budgetary austerity, reversal of political alliances), the effects varied since the modes of regulation and (as we have just seen) the modes of growth did not obey the same principles. Furthermore, actors' strategic choices varied from one country to the next. In this respect, the search for a post-Fordist regime was regularly frustrated since none of the ideal-type models (return to competitive regulation, massive delocalisation of Fordist industries, search for cooperative regulation) was able to predominate, much less spread to economies throughout the world (Boyer/Durand 1993).

Thus, not only could the modes of regulation differ for a particular kind of growth regime, but several such regimes relied on varying types of institutional architecture. This is how RT deals with the question concerning the diversity of capitalism – despite the fact that this issue was not part of its initial focus. Indeed, a broader perspective would show that the theme has played an increasing role over time (Table 1).

Table 1 The status of international comparisons in Regulation Theory

Authors	Research aims	Implications for the unicity / diversity debate	Conditions in which diversity persists
Aglietta (1976)	Explain the originality of the American crisis	The U.S. is a laboratory for one theory of capitalism	Insistence on endogenous changes in the modes of regulation
Cepremap-Cordes (1977)	Verify the hypothesis that Fordism constitutes the basis of France's postwar growth regime	The growth regime has strong analogies with the U.S. but the institutional forms vary	Same form of economic regime but diversity of institutions supporting it
Delorme / André (1983, 1989)	Verify the hypothesis of an inclusive state	Changes after the Second World War, to varying degrees depending on the country	Expression of the idiosyncratic nature of 'institutionalised compromises'
Barou / Keizer (1984); Baslé / Mazier / Vidal (1984)	Analyse how the major economies changed during the 1970s crisis	Macroeconomic trajectories are heterogeneous (growth, profits, inflation, unemployment)	Insertion into international division of labour tends to enhance the persistence of regulation modes
Boyer (1986a)	Analyse the generality of the Fordist growth regime in Europe	A lot of diversity in the forms of wage-labour nexus – hence in the modes of regulation	Historical nature of work-related conflicts and institutionalisation of the wage-labour nexus
Boyer (1991)	Analyse the transformation of the wage-labour nexus in the OECD countries to detect post-Fordist configurations	No convergence towards a competitive or cooperative type of wage-labour nexus	The institutional forms inherited from the past also condition the strategies of wage-labour nexus reform
Boyer (1994)	Characterise and compare growth regimes in developing countries	Contrast between Latin America and Asia	Specialisation-related differences (natural resources versus industry) and configuration of the wage-labour nexus
Boyer (1996)	Test the hypothesis of an economic and institutional convergence amongst OECD countries	No general convergence trend, coexistence of at least three forms of capitalism	Each model has its own specific innovative capabilities; efforts to strictly imitate the institutions of other models fail
Théret (1997)	Compare national social protection systems	Diversity is the rule, due to variable combination of responsibilities amongst firms, family, and state	Permanence of different orders imbued with a modicum of autonomy
Amable / Barré / Boyer (1997)	Examine the relationships between the innovation system and the mode of regulation by comparing 12 countries	Confirmation of the coexistence of four variants of capitalism: market, meso-corporatist, statist, and social democratic	Ordered internationalisation deepens specialisations relating to institutional endowments
Boyer / Freyssenet (2002)	Analyse the succession of productive models plus their relationships with growth regimes	Durable coexistence of several productive models within one and the same institutional architecture	Competition causes innovation, hence a renewed diversity of productive models
Boyer (2001a)	Seek institutions favourable to an ICT-driven growth regime	Plurality of configurations: market capitalism, social democracy, an economy that plays catch-up	Resistance against imitation and naive benchmarking
Marques-Pereira / Théret (2001)	Compare two Latin American countries with two Asian countries	Various links between economic and political spheres, absence of geographic homogeneity	System effects between a political and an economic regime; strategies open up during crisis periods
Quémia (2001)	Analyse the trajectories that Latin American countries have pursued since the 1970s	Varied modes of regulations and types of crisis in Latin America	Specialisation is inherited from the past; nature of political compromises and forms of the state
Amable / Petit (2001)	Analyse the distribution and development of social innovation systems (SIS)	Increasing number of SIS to at least six Classification's sensitivity to criteria and indicators	Strength and plurality of technological, strategic, and institutional complementarities
Amable (2004)	Update the previous analyses of SSI until the early 2000s	Confirmation of the persisting diversity of capitalism	Existence of complementarities and absence of mimetism in national economic policy
Boyer (2004a, b)	Find out the institutional configurations favourable to a knowledge economy	At least three distinct configurations	Path dependence of political compromises and related complementarities

The importance of politics in the diversity of capitalism

Modern literature offers more and more explanations why capitalism's organisations and institutions are so diverse. For example, the fact that information is imperfect means that people need to manipulate agreements, organisations, or even institutions helping them to overcome negative effects such as a lack of equilibrium, rationing, or unsatisfactory equilibriums (Stiglitz 1987). Yet there is no such thing as a unique solution. Similarly, the existence of increasing returns and innovation-related externalities opens up the possibility of multiple equilibriums and path dependency (Arthur 1994), this being a second major source for differentiating productive systems and therefore economies. As for evolutionist theories, they emphasise co-development processes between technologies, institutions, and norms, leading to diverse trajectories that tend to diverge over time (Dosi 2002). From the very outset, regulationist research has stressed the role that political processes play in the genesis of institutional forms, as opposed to a technological kind of determinism. Analysis of French capitalism over the long run has demonstrated the crucial role of social conflicts and how such conflicts are transmitted via the political sphere – which in turn drives change in the legal framework (Cepremap-Cordes 1977, 1978). At a very general level, institutional forms (to wit, the codification of basic social relationships) have been viewed as an intermediary between two forces, argues the French legal specialist who inspired the Grenoble school of regulation's first studies (De Bernis 1977). This general hypothesis was largely corroborated in later research. If such a wide diversity of employment relationships can be found, it is because social conflicts have led to capital-labour compromises that will vary greatly from one country to the next. To use just one example, workers' struggles in the United States and France may have concerned increasing real wages and the recognition of certain social rights, but in Japan what emerged from labour conflicts were compromises about the promise of stable employment (Boyer 1991; Orléan 1991).

In much the same way, the concept of institutionalised compromise that was developed to account for changes in French taxation, public spending, and regulatory environments (Delorme/André 1983) demonstrated the relative contingency of forms of public intervention. Above and beyond the state's growing role in the economy and in society, public spending and taxation trends were strongly affected by a succession of political struggles unfolding within the nation-state (André/Delorme 1989). The building of national social protection systems (NSPS) touched upon the same kinds of processes: the nature of the risks being covered; the organisation of the services on offer; the modalities of funding – all characteristics that were highly affected by past social and political conflicts. In actual fact, observations derived from international comparisons confirmed the extreme diversity of NSPS, with respect to their organisation, quantitative size, or generosity (Théret 1997). Despite pressure to reform such systems, they were far from standardised (André 1997).

Given the scale of public interventions and the role they played in configuring the incentives and constraints with which economic agents have to cope, it is easy to see how the different forms of capitalism have continued to manifest configurations that are much more diverse in nature than is suggested in the naive vision of globalisation as something akin to a convergence with a canonical form of capitalism (Berger/Dore 1996; Boyer 1999). Still, it is questionable whether it is the specificity of the institutionalised compromises coming out of the political sphere that has caused this proliferation of different forms of capitalism, with each entity having ultimately become idiosyncratic in nature. Two reasons at least have attenuated this danger. On one hand, from a strictly empirical point of view, the taxonomies that people have come up with are largely convergent. On the other, *a priori* the emphasis on the macroeconomic properties of growth regimes limits the number of configurations that can be viable over the medium term. These are the two themes that permeate regulationist research, which has moved closer to the objectives of VOC-oriented approaches.

Concordant typologies: evidence of various institutional complementarities?

Should we conclude that there are as many forms of capitalism as there are nation-states? Of course, an increasing number of international comparisons in a variety of fields (employment relationship, relations between state and economy, social protection, innovation systems) have revealed remarkable convergence on just a few configurations. This outcome is all the more noteworthy since these studies were undertaken independently and pursued the specific analytical aims of the corresponding subsystems without necessarily purporting to deliver an overall analysis. *Grosso modo*, we find at least four forms of capitalism (Boyer 1996; Amable et al. 1997). The first puts its faith in the markets and in the independent authorities who are responsible for staving off market excess and the opportunistic behaviour it can generate. The second corresponds to a modernised version of the paternalistic capitalism that was so typical of the nineteenth century, in an environment where capital concentration led to the emergence of large conglomerate firms. The third emphasises the role of social partners in the emergence and management of most institutional forms, at the forefront of which is the wage–labour nexus (including the social protection system). The fourth involves a state-driven capitalism revolving around the crucial role played by national, regional, or local state authorities in making economic adjustments.

All of this raises an interesting theoretical problem. As we know, each mode of regulation is based on a conjunction of five institutional forms: the wage–labour nexus; forms of competition; the monetary regime; relational configurations between the state and the economy; and the modalities by which the economy is inserted into the international relations system. By merely combining these institutional forms, we already come up with 2 to the power of 5 (2^5 i.e., 32 different) variations, even if we

adopt the simplistic hypothesis that each can only assume two extreme configurations (Amable 1999; Amable et al. 2001). But this would mean that configurations are all equally viable. Inversely, if we were to postulate that, in the long run, something equivalent to an optimisation principle reigns over changes in the various forms of capitalism, only one of these configurations should be observable in the end. An intermediary position would envision a selection or imitation mechanism like the one that evolutionist theories have been formalising with regard to the technological choices firms make, thus enabling a long-term observation of several different trajectories.

Given the findings available to us, the first hypotheses do not seem to correspond to observations since more than two configurations (albeit no great number) have emerged from this confrontation between different areas and methods of analysis. It is within this framework that the concept of institutional complementarity shows its true power (Amable 1999; Aoki 2001). This concept is not unrelated to the theory of supermodularity that was put forward in an attempt to account for the coexistence of several productive models and the difficulty of adopting a new model, even one that is superior (Milgrom/Roberts 1990). Does this mean that the RT programme is nothing more than an analysis of the diversity of capitalism, hence a mere extension of the central VOC thesis (presented in the section below)? A second glance at Table 1 suggests that RT's aims have changed through time and are now much more extensive.

Various institutional configurations imply different economic adjustments

In fact, the RT project continues to enhance the understanding of the *evolution* of contemporary forms of capitalism and simultaneously to address the issue of their persisting *diversity*. The danger would be to adopt a pure empiricist method according to which each national or regional capitalism defines per se a typical configuration. Generally, RT considers that two capitalisms belong to the same category if they display the same style in macroeconomic adjustments, i.e. that they share the same 'regulation mode' and accumulation regime. Therefore, two institutional configurations define the same brand of capitalism if they generate the same economic adjustment process. Over the past few years, the central theoretical question has been whether it is possible to develop a synthetic model that can encompass several different regimes and explain most, if not all, of the growth regimes on which long-term historical studies and international comparisons focus.

An initial canonical distinction relates to the *speed of technical change*, captured by the rate of productivity increases and the methods by which they are obtained (labour saving investment, increasing return to scale ...). Thus, intensive accumulation regimes are the opposite of extensive ones (Boyer 1988). A second criterion concerns *the*

nature of demand: is it related to consumption or investment? This second distinction juxtaposes wage-led and profit-led demand regimes (Bowles/Boyer 1990). Therefore, Fordism is reinterpreted once again as an intensive accumulation regime associated with a wage-led demand, within the context of a low degree of internationalisation.

A third criterion reintroduces forms of *internationalisation* as an important characteristic for growth regimes. Depending on whether competitiveness derives from a price effect or from a quality or innovation-based differentiation, growth regimes differ from one another. This is especially important in order to understand how social democratic capitalisms operate: basically, they are small open economies with densely organised cooperation that display an export-led growth regime, in which competitiveness is derived from institutional advantages typical of high levels of education, a highly competent workforce, and dynamic innovation.

Lastly, many recent studies have tried to introduce finance as another factor shaping growth regimes (Aglietta/Mendelek 1987). Others have questioned the degree of novelty associated with information technologies and its ability to create a new growth regime (Boyer 2001a). In both cases, it has become apparent that these potential regimes are not free of contradiction, and above all, that they have had little opportunity to spread to all economies merely by assuming a canonical form of institutional configurations.

Thus, the diversity of contemporary forms of capitalism is not simply the outcome of the international comparison of institutional configurations; it is also evidenced by the building of macroeconomic growth models that try to make explicit the correspondence between a set of institutional forms and economic adjustments.

An even larger diversity for emerging economies

Frequently, economic theoreticians consider that emerging economies are imperfect forms of a canonical brand of capitalism, featuring pure competition, i.e. a liberal market economy. On the contrary, institutionalists argue that each national economy has a specific institutional competitive advantage that clearly distinguishes this economy from others. In this respect, VOC and RT share the hypothesis that similar economies in developed and developing countries display *complementary specialisation* much more than they do typical unadulterated competition. This is one reason we find genuinely new brands of capitalism outside the OECD, the area usually under study in the literature on the varieties of capitalism and regulation theory.

There is a second source of differentiation that relates to *the characteristics of growth regimes* in developing countries. One way of reintegrating the issue of underdevelop-

Table 2 Latin American countries: a large diversity in 'regulation modes' and accumulation regimes

1990s	Argentina	Brazil	Chile	Mexico	Venezuela
Regulation mode	Largely market-led and open to world competition	Between clientelist and market-led	Moderately market-led	Corporatist in crisis	Administered and 'rentier' in crisis
Leading institutional forms	Monetary regime and forms of competition	Basic but declining role of the state	Central role of the state	Monetary regime and free trade agreement (NAFTA)	Leading role of state, but declining efficiency
Complementary institutional forms	Highly flexible wage-labour nexus	Very flexible wage-labour nexus	Accommodating exchange and monetary regime	Accommodating wage-labour nexus	Accommodating monetary policy
Accumulation regime	Intensive and competitiveness-led	Intensive with de-structuring of productive coherence	Extensive and 'rentier' with diversification	Dual: export-led in the north, inward looking elsewhere	Rentier
Performance	High but unbalanced productivity increases	High productivity increases, uncertain growth	Few productivity increases	Productivity increases in modern sectors	No significant productivity increases
Nature of crisis	Structural crisis: bank insolvency, panic devaluation, political instability	Loss of coherence of the productive systems and slow growth	Intrinsic limits of extensive accumulation	Legitimacy crisis that spills over on external viability	Structural crisis during the 1990s

Source: Quémia (2001).

ment is to examine the respective merits of strategies like import substitution and export-led growth (Boyer 1994, 2001b). Another source of differentiation is related to those of competitiveness in the exporting sector: on one side, some countries may emphasise low production costs associated with flexible labour markets, whereas other countries, especially the oil-producing ones, exploit their natural resources (Hausman 1981). It is easy to understand that these contrasted growth regimes are associated with quite different institutional forms. Thus, when the scope of comparison extends from the United States to Europe, then to Latin America (Quémia 2001; Marques-Pereira/Théret 2001) and even to Asia (Boyer/Yamada 2000), RT does not necessarily run the risk of simply characterising capitalisms on the basis of their geographic embeddedness. The observed differences in economic adjustments can be related to a precise set of alternative models.

There is a third and quite important reason for the extension of the number of capitalisms: most institutional forms are the outcome of *social and political struggles* that potentially create unprecedented forms of coordination. For instance, state interventions such as tax codes or the structure of public spending result from political compromise among various political groups. It is why state interventions are so diverse across the world. Similarly, the configuration of the wage nexus is deeply rooted in the

history of work and labour in each country. Given the importance of this institutional form, it is not a surprise to observe the large diversity of labour market adjustments. They differ between Latin American countries and Asian countries (Boyer 1994), as well as between Western and Eastern Europe, not to speak of the domination of informal labour in most African countries. Last but not least, the way a national economy is inserted into the international system is largely a matter of political choice and not simply the legacy of the insertion into the international division of labour (Ominami 1986).

When all these factors are combined, it is not astonishing to find that developing countries exhibit quite original forms of capitalism. This is especially so within Latin American countries (Table 2). The abovementioned arguments would be strengthened by once again including the East European countries that have moved out of a Soviet political and economic regime or by adding China (or even India). Of course, internationalisation disturbs the coherence of various capitalisms, but at the same time it allows the emergence of new forms (see the section on the endogenous evolution of each form of capitalism, below).

Taking the methodological requirements of international comparison seriously

An initial delineation of the RT vs. VOC debate can revolve around the fact that in-depth research has led to a rejection of the hypothesis wherein economies should be analysed in terms of a canonical model. It needs to be remembered that the discovery of Fordism as a principle for explaining American and French growth initially gave birth to the first generation of international comparisons that tried to measure the distances (or the modalities of minor adaptations) between these models and some canonical configuration: hindered Fordism in Great Britain, flexi-Fordism in Germany (Boyer 1986b), permeable Fordism in Canada (Jenson 1990), imposed Fordism in a very reluctant Brazil (Coriat/Saboia 1987), not to mention the devastating oxymoron that was the pseudo-concept of peripheral Fordism (Lipietz 1985).

Comprehensive comparisons should show that these are caricatures of the aforementioned countries' growth regimes and modes of regulation, derived from specific institutional architectures that should be given a name of their own, without reference to some reputedly perfect external model. Either implicitly or explicitly, recent VOC research (Hall/Soskice 2001; Gourevitch/Hawes 2001) use neo-liberal market economies (NLME) as a benchmark configuration against which only one other diametrically opposed form can possibly be contrasted, to wit a coordinated market economy. Before returning to a comparison of proposed typologies, let us first focus on a few methodological issues (Table 3).

Table 3 The methodology underlying international comparisons: an assessment of how they impact analyses of the different

Methods	Characteristics		
	Aims	Advantages/merits	Shortcomings/limitations
1. Benchmarking Ex: OECD (2001)	Assess each entity's variance versus a referent, here the capitalism said to have performed best at the time	Simplicity Homology with company executives' practices	Implied normativity Inaccurate assimilation of national economy with a firm Neglects coherency of alternative forms of capitalism
2. Classification based on data analysis of a whole set of characteristic indicators Ex: Amable/Barré/Boyer (1997); Amable/Petit (2001)	Reveal oppositions and proximities with a population of national economies	Open method in terms of nature and number of configurations Entities are treated symmetrically	Relatively arbitrary choice of items and indicators Potential instability of classifications Limits of a purely inductive method: which mechanisms?
3. Structural method Ex: Théret (1997)	Explain elementary components and examine the compatibility of combinations	Heuristic virtue: defines an ideal-type Theoretical analysis of coherent configurations and comparison with what is observed	A certain proliferation of configurations Methodological difficulty relating to the distinction between harmonic or dys-harmonic configurations
4. Modelling of strategy used by firms operating in given institutional context Ex: Mares (2001); Amable/Ernst/Palombarini (2001)	Ensure microeconomic viability of an institutional ensemble	Clarity of mechanisms ensuring regime's viability Might be compared with what is observed Ability to generate potential modes of regulation	Necessary simplification of existing procedures Complexity of the models formalising a plurality of complementarities
5. Qualitative analysis method Ex: Kogut/MacDuffie/Ragin (2002); Boyer (2001a)	Explain conjunction of attributes to ensure a given outcome (growth, equality, democracy)	Open to nature and number of possible configurations Compatible with limited number of observations	Sensitivity to operational processing Apparent loss of information regarding quantitative data
6. Econometric analyses (segments/series) incl. institutional variables and their combinations Ex: Ernst (2001); Hall/Gingerich (2002)	Test the impact of certain institutions on performance (unemployment, growth, productivity)	Quantitative basis for assessing institutions' impact Reveals institutional complementarities thanks to estimation of crossed terms	In actual fact, a single regime is being postulated here Fragility of findings Hard to interpret findings

The first issue is that real international comparison can only begin when people stop comparing economies two-by-two and, to the contrary, acquire the means to undertake multipolar comparisons. This infers an approach and a range of concepts that are equidistant from each of the entities being analysed. This criticism is particularly poignant seeing as pundits have frequently taken to comparing each economy with the U.S. economy since the 1990s. To cite just one example, literature often pushes the idea that the Japanese economy suffered a crisis in the 1990s because it was unable to adapt the institutions of American capitalism. The same diagnosis was reiterated for Europe, which was said to be lacking in venture capitalists and in the new markets capable of bringing it into line with the information economy. However, the same criticism can be applied to comparisons that are ostensibly multinational yet try in fact to break country samples down into two subsets, one corresponding to economists' traditional conception and the other much more atypical in nature (Hall/

Soskice 2001: 19, 22). Although data analysis has not spontaneously produced this dichotomy, it would seem to be a good method to rely on a U-shaped curve, i.e., a non-linear relationship between a performance indicator and a measurement of the position each economy has taken on a single axis, usually defined by the intensity of its market mechanisms (Hall/Gingerich 2002: 37). Still, this subterfuge is far from convincing, since it actually hides at least one intermediary configuration between the two polar extremes that are emphasised in modern VOC research.

Yet in theory nothing guarantees that a single axis of description (i.e., one with a market vs. state juxtaposition or a company vs. market or market vs. civil society distinction) suffices to describe the constellation of capitalisms – hence the need for a multi-faceted approach (see Figure 2 below).

A more deductive and theoretical method introduces a second reason to broaden the conceptual framework surrounding international comparisons. Loyal to its origins in essence, RT has recently revived the structuralist approach that seeks to find the conditions under which it is possible to combine the various breakdowns of each institutional form or, more generally, the components of a social organisation (Théret 1997). Here the entire problem is to overcome a simple combination of institutional forms by explaining the theoretical reasons why they could be antagonistic, complementary, or independent. The reference to an institutional hierarchy plus the confrontation with a few significant findings from international comparisons distinguish this structural method from a purely combinatory approach.

This strategy is particularly useful in analysing, for example, national social protection systems (NSPS) that have been defined by the intensity of the relationships in three different spheres: economic, political, and domestic. It seems that the attempt to create a dichotomous observation falls apart here since a combinatory approach, confirmed through observation, reveals eight potential configurations that express complex determinants like the ones associated with NSPS. On the one hand, this generalises and clarifies the plethora of taxonomies (Esping-Andersen 1990). On the other, it is no longer enough to merely dichotomise NLME and CME, and this relativises the aforementioned canonical polarisation.

A third approach tries to overcome the illusion that there is such a thing as a strong complementarity, whereby the only reasonable description for Germany is as the flag-bearer of CME, and for the United States as the Promised Land of NLME. How can we be sure that the sum total of institutions characterising the financial system, industrial relations, the education and training systems, companies' organisation, and specialisation will ultimately form a logically coherent system – or that this constellation is not simply the expression of a historical co-development process with certain components that might one day turn out not to be particularly necessary to the mode of regulation's viability? It is specifically through modelling that we are able to surmount this problem, this being a frequently used approach in both RT (Amable et al. 2001;

Gatti 2000; Ernst 2001) and VOC (Iversen/Soskice 2000). Still, the rigorousness of this deduction is associated with the relative fragility of the technical ancillary hypotheses that must be accepted if we want to devise formal outcomes. For the moment, we are unable to verify this complementarity for more than two institutional forms, given the increasing complexity of the formalisations used.

Ideally, an approach formulated in terms of a statistical analysis of the distribution of capitalisms, a structural topology, and a modelling of the impact of institutions on the organisational choices made by firms should lead to a convergent diagnostic. Yet this has been far from the case in currently available studies, despite their already significant consequences.

Why only two forms of capitalism?

In all likelihood this is one of the major differences between VOC and RT. Basically, a major objective of Peter Hall and David Soskice is to show that liberal capitalism is not the only, nor the most efficient configuration. Therefore, for simplicity's sake, they agree to dichotomise the distribution of the various forms of capitalism (Table 4). From a regulationist perspective, it is difficult to accept that the dichotomy of two polarised models can account for an entire distribution of modern economies. The first reason is empirical by nature since it is difficult to get all countries to fit into these two polarised models, even given the data collected by VOC's proponents. It frequently arises in analyses that Japan bubbles out of one side of the pot and the countries of Southern Europe out of the other (Hall/Soskice 2001: i.e., 22). Authors are then tempted to interpret the observable phenomena as minor variants of NLME or CME or else as intermediary configurations.

The strategy of RT is to leave open the number of configurations that has to result from the comparison of qualitative and quantitative methods and various research strategies, ranking from automatic data clustering to macroeconomic modelling. These methods allow us to successively order social systems of innovation and production (SSIP), institutional architectures, modes of regulation and finally types of specialisation. All studies (Boyer 1991, 1995; Amable et al. 1997; Théret 1997; Boyer 2004) have converged to reveal at least four configurations (Table 5).

- A market-oriented capitalism in which commercial logic, adapted by the competition supervision entities, constitutes the main organising principle for almost all coordination procedures. In this group we find all of the English-speaking countries plus Norway sometimes (Amable/Petit 2001).

- Meso-corporatist capitalism's driving principle is the exchange of solidarity against mobility in a conglomerate type of economic unit that is big and diversified enough to survive temporary booms and busts. Japan and Korea are two examples of this configuration.
- A strongly state-driven capitalism is characterised by an economic circuit where most of the components (innovation, production, demand, industrial relationships, credit, etc.) are moulded by a myriad of public interventions occurring at a national, regional, or local level. This configuration is typical of the continental countries taking part in the European integration drive.
- Lastly, social democratic capitalism based on frequent negotiations between social partners and public authorities concerning the rules governing most of the components of social life and economic activity. The Scandinavian countries are flag-bearers for this model.

Table 4 The difference between coordinated and liberal market economies according to VOC

	Liberal capitalism	Coordinated capitalism
Education and training	Investment in general skills	Specific human capital in defined industries or firms
Labour market institutions	Deregulated markets, flexible reward-setting	Employee cooperation and wage moderation
Finance	Monitoring by public information and venture capitalists	Monitoring by banks via long-term ties with firms
Competition policy	Strong competition policy	Intercompany relations allow cooperation

In a sense, this generalised classification features a dichotomy between NLME and CME, but here the two other forms are more than simple intermediaries between market-oriented and ex-market coordination, seeing as they are based both on original principles whose purpose is to smooth out economic imbalances and on methods for overcoming social conflict. For example, we find the same complementarity with respect to the innovation system that we do in the United States (Hall/Soskice 2001: 42–43), but now the notion that competitive advantage stems from one's institutional endowment has been extended to statist and social democratic capitalism, each deploying an economic specialisation that differs from its two predecessors (Table 3, last line). VOC seems to prefer parsimony to the detriment of precision or extra relevancy, whereas RT prefers the other way around – raising questions as to whether we are dealing here with an institutional environment or with a research strategy.

Table 5 The diverse nature of capitalism in Regulation Theory

Regulation			
Market-oriented	Meso-corporatist	Statist	Social-democratic
(1) Overall logic and hierarchical principle			
Commercial logic is the organising principle for almost all of the institutional forms	Principle of solidarity and mobility in an economic unit that is large in size and diverse in terms of output	Economic circuit shaped by public interventions in areas like production, demand, and institutional codifications	Social partners negotiate the rules governing most aspects of society and the economy
(2) Implications for institutional forms			
<i>Wage-labour nexus</i>			
Significant decentralisation of wage bargaining, individualisation of pay and segmentation of labour market	Wage compromise within large companies but pay hikes are synchronised	Trend towards a strong institutionalisation of rules on employment, working hours, wages, and social benefits	Traditionally with a centralisation of collective negotiations, under a constraint of short and medium-term competitiveness
<i>Competition</i>			
Concentration restricted by legislation, reshuffling from one oligopolistic type of competition to another	Relatively intense in the product markets, involving big companies with activities in many different markets	Moderate seeing as it is channelled by public regulations or by professional associations, with high degree of capital concentration	Small number of big firms (that are also highly internationalised and thus have to compete)
<i>Money and finance</i>			
Central bank is independent, financial market logic prevails, financial innovations proliferate, companies are tightly run by a financial logic	Role of main bank and keiretsu in funding and capital allocation. State authorities (financial supervisors/Central Bank) have tight control	State has tight control over credit and monetary policies. Traditionally the Central Bank has had little autonomy to speak of, the financial sphere having played a crucial role	Most funding is by the banking sector. Monetary policy aims to enhance employment and at a later date competitiveness
<i>The state</i>			
Fragmented into series of agencies and control entities, growth possibilities are highly restricted because of competition in the political marketplace	Ensures provision of collective services and coordination measures that the big firms are incapable of running. Small size but significant role	Strong quantitative and qualitative development of state interventions: nationalised companies, regulations, public spending, social benefits, etc.	Multitude of public interventions leads to financial transfers and extensive and restrictive regulations
<i>Insertion into international system</i>			
Adhesion to free trade principles, degree of autonomy varies depending on status and size (differences US vs. UK)	Trade and finance-related choices are conditioned by the imperative of technological and economic development	Traditionally with a tight state control over external relations (tariffs, norms, quotas, restrictions on financial flows)	Acceptance of competitiveness principle based on technological and organisational innovation
(3) Characteristics of the mode of regulation			
Regulation very market-oriented, controlled by sophisticated legal mechanisms	Large companies, the market, and the state make adjustments at the meso-economic level	State at heart of macroeconomic adjustments, with markets and firms adapting to its rules	Tripartite bargaining (employers-unions-state) lies at the heart of institutional reforms
(4) Effects on:			
<i>Innovation</i>			
Schumpeterian waves predicated on radical innovation, preponderance of a patent-based logic and individualisation of benefits derived from innovation	Aptitude to copy and adapt products and processes by operating incremental yet profitable innovations	Radical innovation supposing major investments and a long-term time frame. Adaptation of Fordist (i.e. relatively centralised) innovations	Innovations are focused on resolving social and economic problems, be they marginal or radical
<i>Specialisation</i>			
Sectors tied to radical innovation: IT, space, pharmaceutical, financial and leisure industries	Sectors requiring major coordination efforts and mobilising a localised but cumulative type of competency: auto, electronics, robotics	Sectors involved in major public infrastructures: transportation, telecom, aeronautics, space, arms industries, among others	Sectors tied to social demand (health, security, environment. etc.) or that exploit natural resources through technological recovery

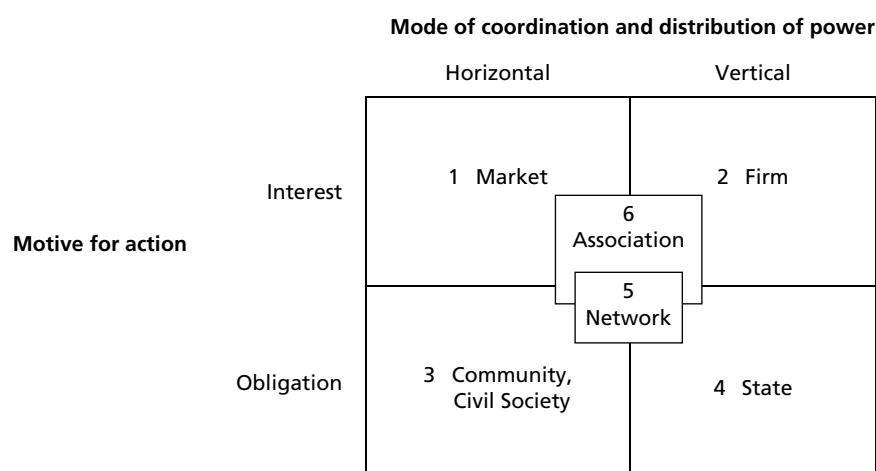
Source: Amable/Barré/Boyer (1997: 194–195).

A variety of institutional arrangements based on contrasting logics

The empirical argument would not be so crucial if it were not associated with a theoretical reasoning: by creating a dichotomy between a neo-liberal order and a coordinated economy, VOC has dramatically simplified the different market logics and the multiplicity of institutional arrangements. On one hand, from a strictly semantic point of view, we should not forget that markets are capable of ensuring an entirely efficient coordination as long as they can be fully instituted and if the size of their scale returns and quality-based differentiation can be used to verify the extent of their viability (White 1981, 1988). This process requires a great deal of agreement amongst participants – and therefore an advanced level of coordination – that has to be found outside the market. This is necessary in order to counteract the strategies of the firms in their efforts to attain oligopolistic and even monopolistic positions: they manipulate prices or quality, establish reputations, or control norms. In this respect, the NLME are just as coordinated as the CME, but in a different manner.

On the other hand, a review of the literature on the bases of institutional economic theories (Hollingsworth/Boyer 1997) shows that it is no longer possible to see the market as the sole process of coordination, no more than it is to view the market and the state as being diametrically opposed to one another. After all, depending on whether an action is motivated by one's interest or by an obligation principle and as a function of the horizontal (or inversely, the asymmetrical) nature of the inter-actor distribution of power, we can define a myriad of modes of coordination. Excluding the intermediary forms represented by networks and associations, we end up with four polar principles (Figure 1).

Figure 1 A taxonomy of the different coordination principles



Source: as per Hollingsworth/Boyer (1997).

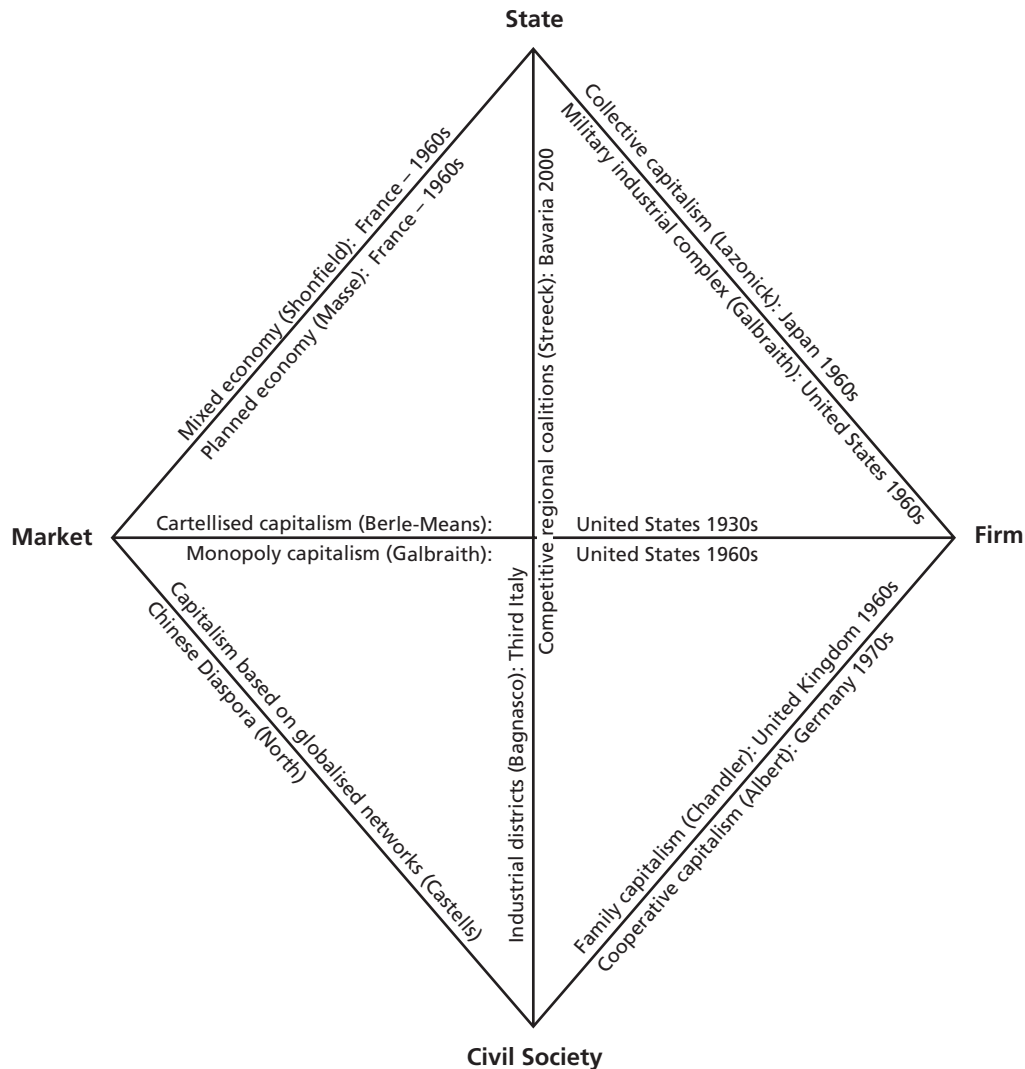
These four polar principles are

- the *market*, supposedly an anonymous place for comparing a whole set of behaviours on the part of actors who are driven by their interests and endowed *a priori* with equal powers;
- the *company*, or more generally the private hierarchy, which codifies coordination by wielding decisional power over actors who operate in line with their economic interests;
- the *community* and by extension the civil society, which is predicated upon an obligation principle and reputedly based upon horizontal relationships;
- the *state*, which combines an obligation principle with coercive power. As such, it is diametrically opposed to the market, which is meant to organise voluntary relations between individuals acting on their own interests and imbued with equal powers.

This taxonomy has some major effects. RT suggests that all institutional forms borrow from these four orders in proportions that will vary greatly from one social organisation to the other. Above all, RT provides the basis for a radical criticism of this polarisation of market capitalisms, depending on whether or not they are of the coordinated variety. The form of alternative coordination stressed in VOC can be the space that is controlled either by *the firm* (especially when it is a large conglomerate) or else by multiform *state*-orchestrated public interventions, not to mention the role that *communities* and more generally *civil society* play in facilitating trade by building up trust. As much as anything else, this is a definition of the ideal types of capitalism, all of which are far from equivalent to one another. Private monopoly capitalism; centralised planning capitalism; networked capitalism – these are all emblematic figures with their own traits. We therefore need to abandon the reference to a single canonical opposition in order to determine the position that a particular economy holds in terms of these four major forms of coordination (the market, the firm, the state, and civil society).

All in all, most modern VOC analyses of capitalism only cover one partial aspect of these coordination processes and should therefore not pretend to provide a general response (Figure 2). Economists cannot keep from asking which form of coordination is the best. In a world defined by the theory of general equilibrium and characterised by perfect information, an absence of strategic behaviour, public goods or externalities, and perfect forecasts (or in the absence thereof, by a complete set of future markets), the answer is simple – a market economy guarantees that corresponding equilibriums are Pareto-optimal. Yet real economies feature asymmetrical and imperfect information, strategic behaviours usually on the part of large actors, and significant public goods and externalities that can be either positive (education, innovation, healthcare) or negative (pollution, congestion, systemic risks) (Boyer 1997).

Figure 2 Analysis of the varieties of capitalism, expressed as a combination of the four main principles of coordination



As for the NIE, which postulates that transaction cost minimisation is one property of these institutional arrangements, no sure response to the issue of capitalism's institutions has been given yet – despite the title of one of its seminal works (Williamson 1985). NIE basically only deals with inter-market choices, vertical integration, and subcontracting; it scarcely focuses on issues like the state, norms, and civil society's impact on the organisation of firms. NIE still wonders whether it is worth measuring variable transaction costs. They therefore remain unobserved, with the possible exception of their consequences (Ménard 2000). On this point, VOC and RT both criticise the partial and unsatisfactory tactic of basing an institutional economy on the sole principle of minimised transaction costs (Hall/Soskice 2000: 14–17).

With this in mind, we can say that VOC approaches run a de facto risk of focusing on market logic as defined in standard microeconomic theory – and not the other coordination processes that *ex-market* actors use. These processes should indeed be analysed but we have no general theory for them. Is the abovementioned coordination process based on community trust, on a firm's coercive powers and incentives, or on the state's ability to enforce its will by laws and regulations? Lacking any such analysis, there is a big risk that CME will only be seen as an imperfect form of NLME, by economists at least. This is far from the intent of researchers seeking a multidisciplinary approach to capitalism's institutions (Hall/Soskice 2001). Thus we prefer to stress that not all coordination processes have the same aims, nor are they applied in the same contexts.

What has also become apparent is that each of the institutional arrangements ensuring ex-market coordination has strengths as well as weaknesses. Both are activated but in varying order, depending on the context (Hollingsworth/Boyer 1997: 15–18). In a society marked by multiple orders and domains, how can we believe that one order will impose its logic on all the others? In other words, it is inherent to societies that they possess a plurality of institutional arrangements (Luhmann 1995). Better still, one institutional arrangement is usually the precondition for another – and its modus operandi will create imbalances or conflicts that in turn necessitate a third. Thus, the task of institutional economics is not to assess the real architectures it observes by referring to some mythical equilibrium in an entirely market-governed society – even if this were possible, it would contradict Karl Polanyi's fundamental intuition (1944). Instead, what we should be explaining are the preconditions, strengths, and weaknesses of each configuration. Paradoxically, an institutional architecture is viable when each individually incomplete mechanism is adjusted by another partial one, with the quality of the whole being superior to that of its constituent parts (Delorme 1999).

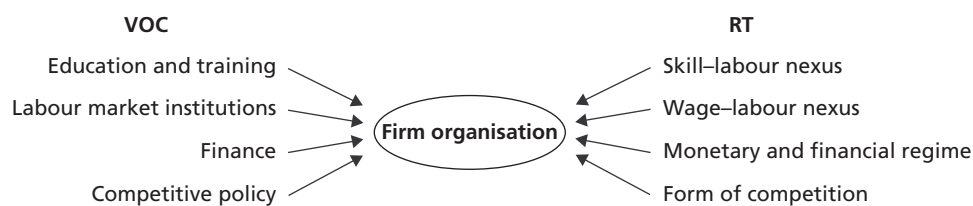
The importance of labour market institutions and welfare systems

This vision may seem theoretical but it is especially important for any explanation of the diversity of labour market institutions, a key component in the varieties of capitalism (Figure 3). The major dichotomies between liberal market economies and coordinated market economies concern four components: the organisation of education and training, the nature of labour market institutions, the degree of financial intermediation, and finally the stringency of competition policy. Clearly, LME basically rely on competition whereas CME try to combine extra-market cooperation with competition (see Table 4 above).

This juxtaposition is especially important for education and training. In the first configuration, individuals invest mainly in general skills; in the second, the institutionalisation of competence formation justifies investing in sector- or firm-specific skills. Similarly, LME exhibit largely deregulated labour markets in which relative wages demonstrate a significant flexibility, whereas CME promote employee cooperation and collective agreements in wage formation. Somehow, labour market institutions complement, and symmetrically are complemented by, the financial regime and competition policy in each of the two configurations.

Within regulationist research, the concepts of *skill-labour nexus* and *wage-labour nexus* mirror the concepts of education and training systems and labour market institutions, whereas the monetary and financial regime is the equivalent of finance, and forms of competition are another name for competition policy in VOC. Thus, both theories stress the importance of labour market institutions. Nevertheless they end up with different configurations.

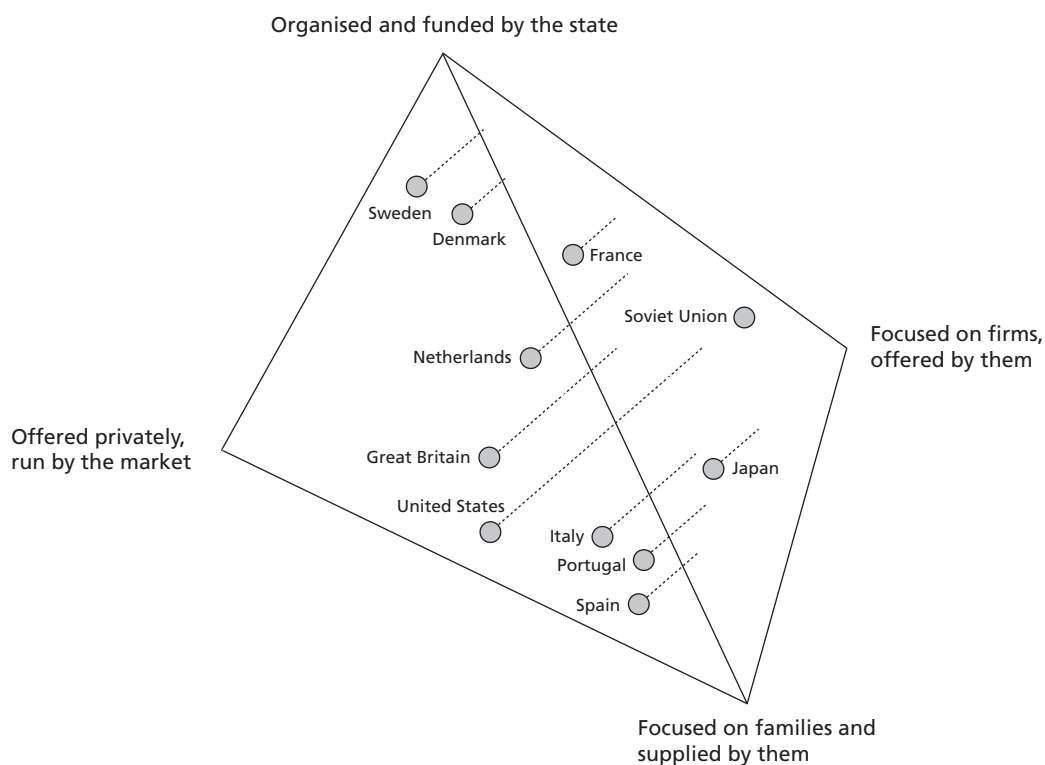
Figure 3 The institutions that shape firms' organisation




RT clearly differentiates between the four brands of capitalism that result from comparative analyses. Within market-oriented economies, decentralisation and individualisation strongly shape employment and wage formation. For meso-corporatist economies, a typical capital-labour compromise takes place at the level of the large firms, and wage hikes are synchronised across firms and sectors. Within state-led economies, one observes a strong institutionalisation of the rules governing hiring, firing, working hours, and even wages and social benefits. Finally, social democratic economies display a fourth configuration based upon a frequent and intensive view of collective bargaining at the national level (Table 4 above).

Such a strong differentiation can be observed in almost any component of the wage-labour nexus. One example would be the organisation of *lifelong training*. Neither a thoroughly free and unregulated market nor the state can provide, in and of itself, the basis for an efficient system, no more than an association or a community can. However, the combination can ensure a much more satisfactory dynamic than that which a pure system, governed by a single logic, could possibly deliver (Boyer 2001c).

Figure 4 The various national social protection systems combine the four principles differently



Segment  indicates the extent of reliance on the market.
Source: Adapted from Boyer (2000).

Another example combining these contrasting coordination mechanisms and the absence of convergence towards a supposedly more efficient system is provided by modern social protection systems. People often think that the market has tended to replace the state, yet remarkably the NSPS have continued to manifest an extremely wide variety of characteristics (Figure 4). Of course this diversity can be interpreted as a historical legacy and a manifestation of path dependency (and the weight of history), for this is a hypothesis that is never irrelevant (Théret 2001). But it also demonstrates a certain complementarity between distinct logics and mechanisms, one that is not necessarily going to disappear even if people's discourses about (and representations of) 'good governance' emphasise market mechanisms. These are already at work in the United States – but they have not delivered the expected results in terms of cost moderation. Moreover they have had an unfavourable impact through their unequal access to social protection. This is another example refuting the hypothesis that an omnipresent market is always the most efficient way of managing interdependencies.

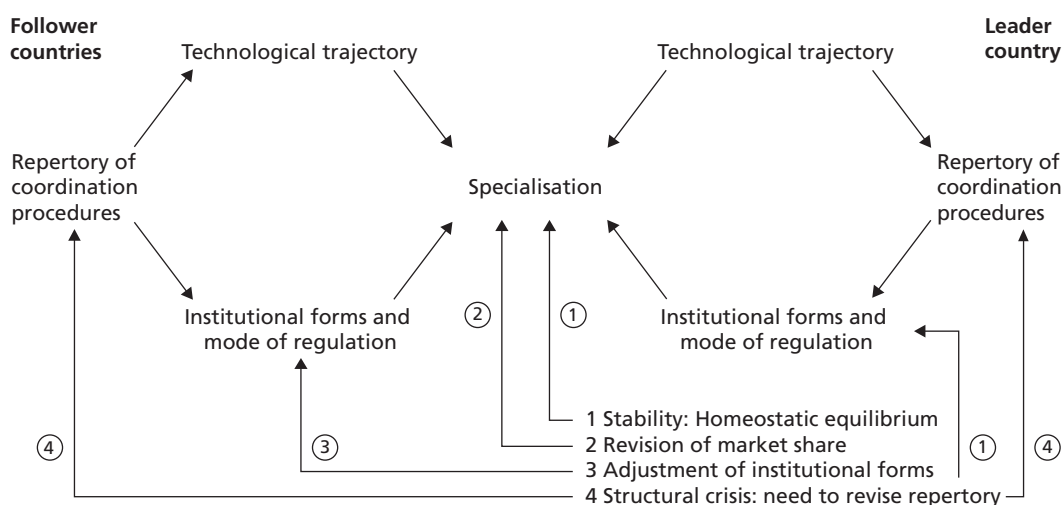
The endogenous evolution of each capitalism

This highlights a third difference between VOC and RT, one involving the dynamics of change and the determinants thereof. The VOC approach gives the impression that national economies primarily change in order to react to external shocks and that the institutional infrastructure stays largely invariable. In a regulation approach, this corresponds to development in the regime, i.e., changes (within a stabilised mode of regulation) comprised of marginal innovations that do not undermine the institutional forms' own powers of stabilisation. In other words, for VOC, the 1990s basically involved a series of small shocks in countries like Japan or Germany, even if the magnitude of each shock (conveyed by the world economy and by finance) was greater than in preceding decades. So we should accept the idea that institutional architecture possesses a basic invariability over the long run and should preserve its power to stabilise economic adjustments.

For RT, on the other hand, the 1990s were a time of upheaval that can only be interpreted as a continuation of previous patterns. The crises in Germany and Japan were structural in nature – after all, short-term measures were unable to improve investment and growth dynamics. Another sign that the crises were a reflection of temporary economic factors was the fact that the 1990s were marked by the erosion of the driver institutions of German capitalism and subsequently of the Japanese miracle model (Boyer 2003). In other words, the crises were an outcome of earlier success. Past strengths were transformed into signs of weakness, especially since the changing international environment helped original modes of regulation (public in Germany, meso-corporatist in Japan) to emerge. The key question is whether the innovations, including the organisational and technological ones enabled by the institutional heritage, were enough to restore the growth regime's dynamic stability. This was clearly not true in Japan, which experienced a lost decade in the 1990s that was marked by stagnation, recurring deflationary phases, and alternating periods of lacklustre recovery and temporary downswings (Boyer/Yamada 2000).

This entices us to predict the threshold where a mode of regulation turns out to be unable to contain an accumulation process's endogenous process and/or to respond to shocks coming from elsewhere (Figure 5). Various formalisations of this mechanism in a closed economy have been proposed for the Fordist growth regime (Lordon 1996, 1997; Billaudot 2002), but also for the financial markets' *modus operandi* (Orléan 1992, 1999). In an open economy, other adjustment processes are at work, mobilising increasingly high-level principles. The shocks may be of the same nature as the ones observed in the past and the growth regime may be in an emergence or maturity phase, but the mode of regulation's interaction is what ensures this adjustment, by means of key variables that can be both internal and related to external relations. However, if cost, quality and innovation trends are no longer compatible with the competitiveness imperative, an economy's adjustment will be ensured by the corresponding country's market share and by its growth rate. Clearly the German and

Figure 5 The different levels of adjustment for a mode of regulation in an open economy



Japanese economies reached the adjustment process's second stage in the 1990s. But there is also a third level where one or several institutional forms become mutually incompatible, leading to a reconfiguration of the mode of regulation. Now, actors (private or public) can draw from existing coordination procedures to try to get new institutional forms to emerge. This repertory is comprised of the constitutional order, the legal architecture, and the social norms and conventions that characterise (often over the long run) the society in which the economy is immersed. Here RT would conclude (unlike VOC) that the two countries we have been tracking have already entered into this second type of crisis.

Using the USSR's collapse as an example, we would find an entirely different form of crisis, one that is even more fundamental in nature: reformers, aware of the mode of development's limitations, have successively tried out a series of reforms to relaunch the economic dynamic, without being able to find in their poor economic and political environment the sources to renew such institutionalised compromises. RT calls such episodes major crises. The analytical power of this taxonomy is not just retrospective. Research has shown, for example, that the liberalisation, openness, and financialisation strategies enacted in Argentina had limitations the country could not help but encounter, given the pegging of the country's currency to the dollar (Quémia 2001).

There are major differences in the ways RT or VOC characterise comparisons of the main OECD countries. For reasons of strategy presentation methods and strategies, VOC stresses the permanency of CME performance. RT wonders why most of these economies (be they governed by a public or a meso-corporatist mode of regulation) run up against their limitations.

From institutional forms to productive model

Can these developments be used to inspire a new generation of institutionalist studies? In actual fact today's VOC proponents, specifically Hall/Soskice (2001), invite regulationist searchers to explore new or shared themes and above all to develop a theory of the firm, because they think that

... relevant actors can be individuals, firms, groups of producers or governments. In any event, this political economy focuses on the firm, and considers companies to be decisive actors in a capitalist economy. (Hall/Soskice 2001: 6)

Another question concerns the relations between the political and economic spheres: how can the trajectories of the two approaches be reconciled? Amongst the most common themes is the question of institutional complementarity, which can be broadened by various methodologies whose respective merits should be listed. Lastly, we hardly dare to raise the great unresolved question of social sciences: how can the micro- and macroeconomic levels of the analysis be linked?

Towards an institutionalist theory of the firm

This focus on the firm is one of the specificities that modern VOC claims.

We apply a set of concepts commonly used to explain behaviour at the micro level of the economy to problems of understanding the macroeconomy ... Markets and hierarchies are features of neo-liberal and coordinated market economies but we stress the systemic variation found in the character of corporate structure (or hierarchies) across different types of economies and the presence of coordination problems even within hierarchical settings. (Hall/Soskice 2001: 14)

Of course, for almost a decade now RT has been looking for the right way to analyse the firm. Should we start with evolutionists' conception and stress the role of routines and how competitors choose them (Coriat/Dosi 2002) or should we follow the institutionalist approaches, based on transaction costs, for example Coriat/Weinstein (1995)? VOC authors propose another starting point, which is nothing other than the theory of supermodularity applied to company management systems (Milgrom/Roberts 1990).

Actually, these propositions mesh with a number of recent RT-inspired studies. The same applies to GERPISA (*Group for the Study and Permanent Research of the Automobile Industry and Its Employees*) research into productive models, wherein productive organisation is presented in a way (Figure 6) that is relatively similar to Hall and

Figure 6 The productive model concept as a starting point for an institutional analysis of the firm



Source: adapted from Boyer/Freyssenet (2000: 24).

Soskice, with firms bathing in a coordinated (p. 28) or neo-liberal (p. 32) market economic environment. At least three convergences can be found between these two approaches:

- An environment is more than a price system since the institutional forms governing the financial sphere, competition, and the wage–labour nexus concentrate and codify information relevant to firms (Aoki 2001) and inform organisational choices. The impact of institutional forms can be added up, depending how the *growth mode* and income distribution are described.
- *Profit strategy* relevancy mostly depends on institutional and macroeconomic factors, conveyed by the uncertainty and the changes that firms encounter in their product policy and productive organisation, plus the way they structure their employment relationship – this being how an overall wage–labour nexus breaks down at the firm level (Billaudot 1996).
- Lastly, the medium-term viability of a firm infers something akin to a governance compromise that allows for a permanent adjustment of management to signals from environment and to the requirements of the chosen profit strategy.

Thus, a firm fits into a network of interdependencies with its general institutional environment – this being exactly the key message that VOC conveys.

We believe it would be unrealistic to consider that the economy's overall institutional architecture and especially actors' coordination mechanisms (i.e., markets, institutional networks, collective organisations¹) are constructs created and controlled by a given firm. ... In sum, and in many respects, strategy derives from structure. (Hall/Soskice 2001: 15)

As a result, the possibility that the two approaches agree on the theory of the firm is less farfetched than it first seems when the authors affirm that their work is based on a new economic theory of organisation and that they are trying to develop an economic policy that is appropriate for market economies. Firms' organisational choices are actually informed and constrained by the overall institutional architecture, not the other way around. Formalisations respectively undertaken within RT (Amable et al. 2002) and VOC (Mares 2001) effectively use characteristics drawn from the external environment (be it the importance of market-based funding for firms or the nature of social protection) as data to deduce the organisational systems on offer for firms bathing in an environment they do not individually have the power to alter. Thus, the research programmes of the two approaches converge.

Organisational and institutional complementarities and isomorphism

If we were to accept Peter Hall and David Soskice's outlook per se, we would have to agree that they extend the supermodularity theory of firm organisation to capitalism's institutions. Now, this may be an acceptable approach, since – contrary to the naive conception of benchmarking wherein each contribution is strictly additive (so that it is easy to move from 'one best way' to the next) – theory does prove that contrasting management mechanism configurations can coexist. In fact, each of these diametrically opposed configurations of company organisation is capable of turning into whole array of specific economic institutions.

For example, the just-in-time and total quality model presupposes an industrial district type of organisation to satisfy time constraints on the delivery of components, the need for a polyvalent workforce (so as to move easily from the production of one good to another) and industrial relations that are sufficiently pacified to stave off any

1 This succession of coordination mechanisms, all of which differ from one another and constitute alternatives to the market, suggests that the authors have finally agreed with RT and in particular with the taxonomy deployed in figures 1 to 3. Once again, this substantiates the new idea that it is for reasons of audience receptiveness to their analyses in the English-speaking world that Peter Hall and David Soskice have adopted the binary opposition between NLME and CME. Furthermore, the real opposition is between the German and US economies, as shown by the succession of empirical references in their texts (figures 3 and 4; figures 5 and 6). As such, this opposition runs contrary to the rest of their empirical data, which covers a wider sample of OECD countries (tables 1 and 2; figures 1 and 2) (Hall/Soskice 2001).

strike threat, which should be limited to a very small workgroup and not block the entire value chain.

Hence it is theoretically possible to generate varieties of capitalism based on a combination of two hypotheses: a technological or organisational type of complementarity between work, equipment, and product; versus an isomorphism between companies' organisation and global economic institutions. In terms of what our authors write, we could formulate the following equation:

$$\text{Hall/Soskice (2001)} = \text{Milgrom/Roberts (1990)} + \text{DiMaggio/Powell (1991)}$$

or in more theoretical terms:

$$\text{VOC} = \text{theory of supermodularity} + \text{isomorphism between organisation and institution.}$$

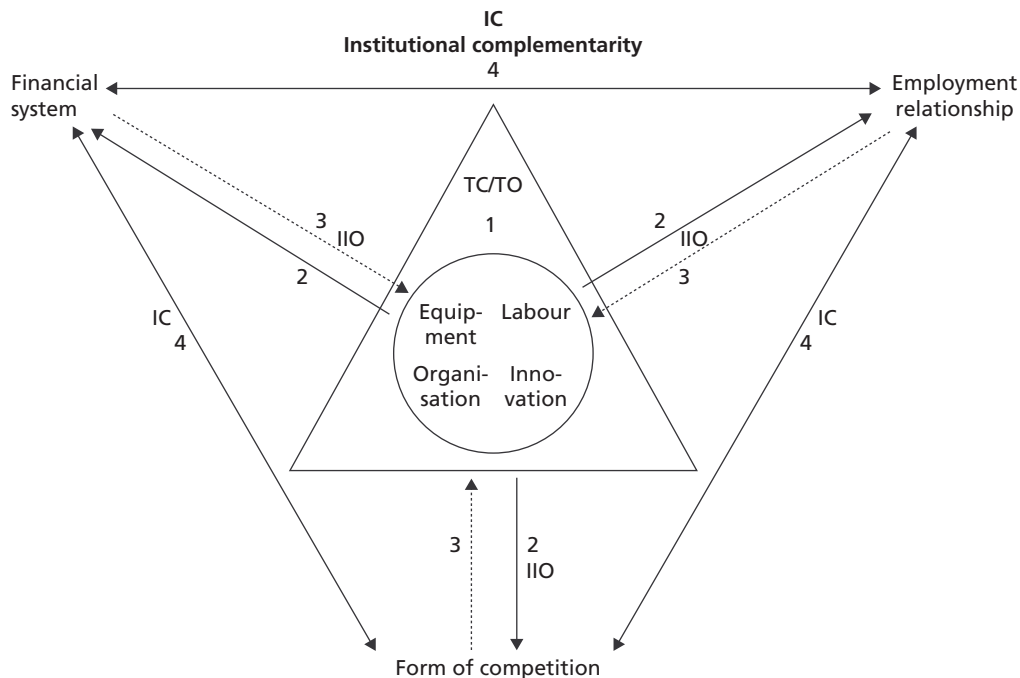
Once again a careful examination of the reasoning and clarity of Hall and Soskice's figures 3 and 4 (2001: 28, 32) demonstrates that the complementarities relate to global institutions, which, in turn, shape, constrain, or provoke appropriate management mechanisms and routines within firms. The causality is clearly expressed: it goes from the macro- to the microeconomic, even if the overall dynamic is never more than the result of a conjunction of the development of different firms. And yet, there is absolutely no reason to select these macroeconomic properties as an expression of the constraints that the representative firms face.

Thus the distance between VOC's reality and results and RT's orientation is finally reduced. Figuratively, we could postulate a second equation that is representative of the latest RT developments, but, in a sense, of VOC as well:

$$\begin{aligned} \text{RT microeconomics} = \\ \text{institutional complementarity} + \text{isomorphism between institutions and organisations.} \end{aligned}$$

This paves the way for a vast but difficult field of research, where we would examine the extent to which these two concepts constitute alternatives (Figure 7) or, inversely, can be combined in practice, if only because technology, companies' organisation, and economic institutions all co-develop over the long run. Of course, this is not the only work to be done.

Figure 7 Links between organisational complementarity, organisational/institutional isomorphism and institutional complementarity



1 TC/TO Technological/organisation complementarity
(Ex.: Just-in-time, total quality, polyvalence)

2&3 IIO Isomorphism between institutions and organisations
(Ex.: Just-in-time, industrial district polyvalence, training system)

4 IC Institutional complementarity
(Ex.: industrial district, stable employment, patient financial market)

Heterogeneous firms within a clear institutional architecture

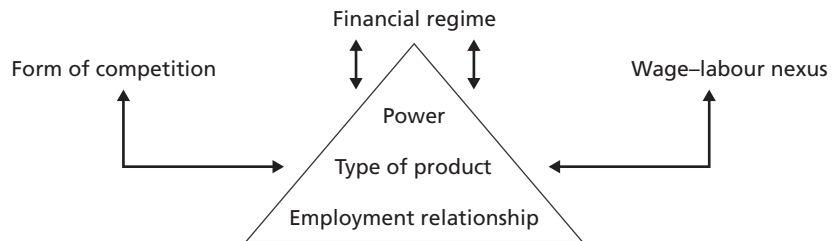
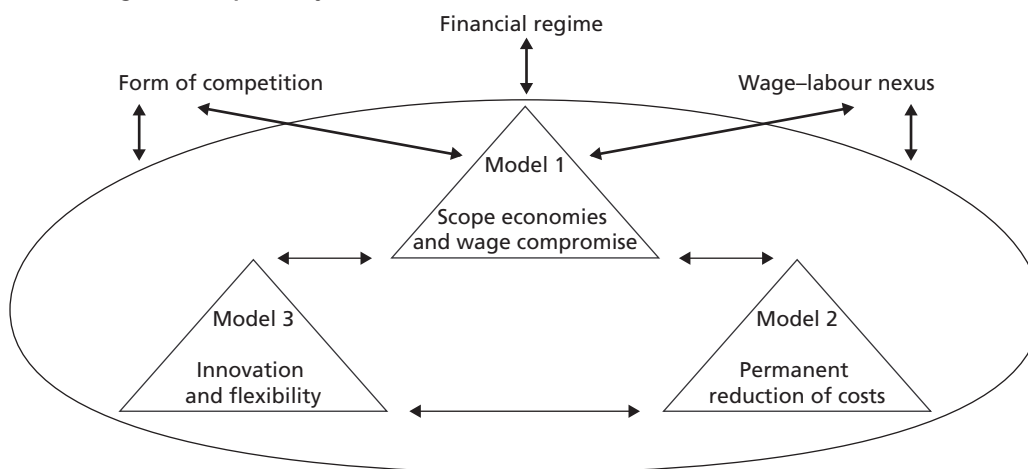
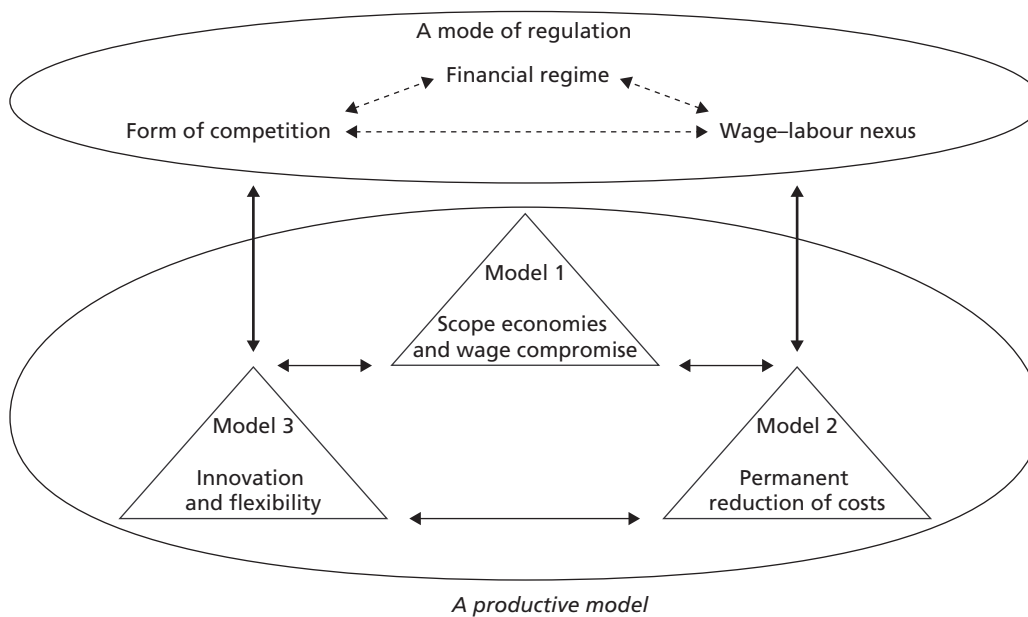
This polarisation fits one of major lessons derived from evolutionist approaches (Dosi 2002). Moreover, formalisations of the evolutionist model suggest that macroeconomic patterns are the *emerging properties* of selection and learning mechanisms, without any correspondence to the trajectories of the firms that comprise them (Dosi et al. 1993). In other models it appears that heterogeneity between the technologies being implemented, the products on offer, and companies' forms of organisation is a precondition for the corresponding economy's long-term stability (Eliasson 1984, 1998). However, both VOC and RT suffer from a major deficiency, which is that they assume (at least implicitly) that one single form of organisation prevails within a given

capitalism. This hypothesis is refuted in the case of the United States, if only because information technology has given birth to an organisational model in Silicon Valley that is quite different from the vertically integrated firm that had been so characteristic of the United States during its era of strong growth. Thus the Silicon Valley firm (SV) coexists with the modernisation of firm A, not to mention that certain American multinationals belong to yet another category, that of global firm G (Aoki 2001). The homogeneity hypothesis is just as refuted for Germany, inasmuch as organisational models can vary greatly from one region, sector, or marketplace to the next.

This is one of the major findings (and a surprising one at that, given regulation theory's initial conception of the firm) of GERPISA's comparative studies, which have proven the coexistence of contrasting organisational models within every country and within a given sector (automobile). Ultimately this has led to an interesting interpretation: within a given institutional architecture, the markets and the division of labour's development and sophistication have created room for a wide array of profit strategies, each endowed with a competitive advantage and seeking to exploit other strategies' weaknesses, without any one being able to conquer the whole market. Moreover, the distribution of corresponding organisational models has varied over time as the institutional environment has changed (Figure 8).

The challenge facing institutional theories is a considerable one – how to preserve hypotheses of institutional complementarity and isomorphism between firms' organisations and institutional architectures while abandoning the postulate of an emblematic firm, one that has been clearly rejected by observing the modern distribution of firms (and in a succession of industrial surveys). Still, awareness of the complexity of an approach that is supposed to highlight the macroinstitutional foundations of a microeconomy injects a great deal of relevancy into institutional and historical macroeconomics, since the only thing we could hope from a unique analytical model would be for it to deal satisfactorily with both the macro- and microlevels.

As such, it wouldn't be at all absurd for us to continue to explore the reasons why varieties of capitalism exist that are based on something more than a mere diversity of technological and organisational complementarities at the firm level. This could be an ideal project to enhance cooperation between researchers who see themselves as belonging either to VOC or to RT – as long as each side is aware of the similarities between their respective research orientations.

Figure 8 From the mode of regulation to the heterogeneous nature of firms: three steps**A. An emblematic firm facing a given environment****B. A similar sectorial context, but with a diversity of profit strategies and industrial models, which together comprise a system****C. Ensuring a productive model's coherency with a mode of regulation**

- ↔ Influence of context on the industrial model(s) and vice versa
- ↔ Complementarities between profit strategies and industrial models
- ⋯↔ Complementarities between the institutional forms defining the mode of regulation

Conclusion

We can summarise the previous developments in the five following propositions.

The bulk of comparative institutional analyses does conclude that *contemporary capitalisms significantly differ* in terms of their basic institutional forms as well as their various organisations at the firm level. It is especially so for labour market institutions, welfare financing, and organisation; yet we should also not forget just how idiosyncratic the relations are between state and economy in developed as well as developing countries.

1. In addition to much empirical evidence, numerous *theoretical reasons* may explain the diversity of capitalist configurations. Generally, most if not all institutional forms are the outcome of social and political conflicts that are embedded in a specific society for a given historical period. The basic institutions that govern a capitalist economy usually combine a significant variety of coordinating mechanisms: on top of the conventional opposition between state and market, actors such as communities, networks, associations, and private organisations play a role in building economic institutions. Once created, these institutions exhibit large sunk costs and thus display increasing returns. This is an explanation for a specific form of path dependency. Lastly, evolutionary theories suggest that technologies, institutions, and organisations co-evolve. Thus, there is no clear force that would bring about the convergence of various capitalisms.
2. This institutional diversity shows up in a variety of ‘regulation modes’ and accumulation regimes that differ across time and space. For instance, during the Golden Age of rapid growth in most OECD countries, the Fordist regime was not a general feature at all, since, for instance, social democratic countries experienced an export-led growth based on differentiation by quality and innovation. Therefore, contrasted growth regimes were the result of the *institutional competitive advantage* of each domestic space. In the 1990s, the finance-led growth regime was basically restricted to the United States and, to a minor extent, to the United Kingdom, since most other OECD countries continue to experience a transformation of their previous growth regimes.
3. This diversity of capitalism is not restricted to the dichotomy between liberal market economies, such as the U.S. one, and coordinated market economies, of which Germany is a clear example. Within OECD countries, at least four brands of capitalism can be diagnosed. This spectrum is still widening with the transformation of former Soviet-type economies in Eastern Europe and in China. Furthermore, the newly industrialising countries, especially in Asia, are probably enlarging the repertoire of capitalist forms. A lot of research has still to be done in order to build a fully-fledged theory of the evolution and the diversity of capitalism.

4. Lastly, the diversity of institutions and forms of organisation is often interpreted as stemming from delayed adjustment, social or political inertia, or dependency on one's historical legacy. The present analysis stresses that each institutional and organisational configuration develops its own adaptation and innovation capabilities, meaning that it would be inaccurate to oppose the dynamism of certain forms with the archaism and immobility of others. Trying to ascertain *the margins of development and flexibility* of a particular type of capitalism and the *mutatis mutandis* of a kind of productive model thus constitutes another promising research objective.

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